

INTESTINAL OBSTRUCTION CAUSED BY MECKEL DIVERTICULES

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SUMMARY: Meckel diverticulitis is the most common congenital abnormality of the gastrointestinal tract. It is presented with intestinal obstruction and bleeding in early ages of life while it is usually diagnosed incidentally in adults. It is formed with the closure of omphalomesenteric duct at 5-7 th gestational week. In this study, we present a case with meckel diverticulitis where it connects to anterior abdominal wall with obstructing intestine causing ileus.

Key words: meckel diverticulitis, complication, ileus

INTRODUCTION

Meckel diverticulitis was first described at 1598 by Hildanus. Johan Friedrich Meckel defined the anatomy and physiology of the diverticule at the beginning of 19th century (1). Meckel diverticule is originated from the consistent of gestational vitellointestinal duct. It is localised at the antimesenteric site of ileum 50-80 cm away from ileocecal valve and would contain heterotropic pancreatic tissue and mucosa of stomach (2). Its length is approximately 0,5-13 cm and more common in males. The diverticule contains every part of intestinal wall (3). Meckel diverticule is the most common congenital abnormality of gastrointestinal tract (%1-3) (4). In this study, we aim to present a case with Meckel diverticulitis that cause intestinal obstruction because of its' adhesion to anterior abdominal wall.

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CASE

A 21-year-old girl admitted to hospital with abdominal pain that had been lasted for three days. In her physical examination there was obvious abdominal distention, tenderness and rebound tenderness. Rectal examination was normal. Leucocyte level was 15.3 K/uL. Abdominal X-ray revealed air - fluid levels. Abdominal ultrasonography showed free fluid in abdomen and dilatation of bowels. Patient was operated. During exploration, a long meckel diverticule that was adhered to anterior abdominal wall from its' tip was noticed (Figure 1). Adhesion formed a bridge between abdominal wall and diverticule causing a strangulation of the intestinal segment which passed through. Adhesion was removed and intestinal segment that involved diverticule was excised. Patient was discharged at fifth postoperative days.

DISCUSSION

3.7-6.4 % of Meckel diverticule is symptomatic during lifetime (5). 80 per cent of these patients are



Figure 1

under 15 years old. It is usually presented with bleeding during childhood while most common complication is obstruction for adults (6). Also diverticulitis is one of the most common complications that happens after the lumen of diverticule is obstructed with feces. Many other complications like torsion of diverticule, cecal or intestinal volvulus around diverticule, massive gastrointestinal bleeding and perforation were reported (8, 9, 10, 11, 12, 13). In our case Meckel diverticule caused intestinal obstruction by hanging an intestinal segment because of its' adherence to abdominal wall.

Frequently, Meckel diverticules are diagnosed inci-

dentally during operation. Ultrasonography shows secondary changes caused by diverticule. Presentation of diverticulitis is similar with symptoms of acute apandicitis, so it is usually diagnosed while patients are operated because of this reason. We diagnose Meckel diverticule during exploration which is done to resolve ileus. Treatment of Meckel diverticule changes according to presentation of the patient. Schilke and Johnston et al suggested elective diverticulectomy for incidentally diagnosed diverticules (14) while Soltero advocated that diverticulectomy would be done for certain pathologic cases (5). There are also different approaches for surgical removal of diverticules. Like our case, wide-based diverticules should be excised with segmenter intestinal resection unlike narrow-based diverticules which a simple diverticulectomy might be sufficient.

CONCLUSION

Meckel diverticules and its' complications should be kept in mind for patients who are presented with obstructive symptoms without obvious cause recognised with radiological interventions.

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